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10/599,309

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Kosuke Naito

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EXAMINER

PITT, BRYAN W

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,309	<b>Applicant(s)</b> NAITO ET AL.	
	<b>Examiner</b> Bryan Pitt	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05 March 2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 25 March 2004. It is noted, however, that applicant has not filed a certified copy of the 2004-089003 application as required by 35 U.S.C. 119(b).

### ***Specification***

2. The disclosure is objected to because of the following informalities: there are several grammatical and idiomatic errors that make the specification unclear. Examples of some unclear phrases used in the specification are: "the current mobile communication system does not correspond to access limit varied depending on users or base stations as the unit basis." (page 1 lines 19-21) and "a relatively easy method can accomplish the access limit varied depending on the terminal and the base station only between the terminal and the base station" (page 5 lines 6-8).

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 5-6, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The claims appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

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6. Claims 1, 6, and 9 recite the limitation "a list of base station ID numbers of an accessible base station or an inaccessible base station every identification signal for specific use " in lines 8-9. It is unclear what this limitation means. The claims also recite the limitation "every the detected identification signal for specific use" in line 11. It is unclear what this limitation means.

7. Claim 5 recites the limitation "as the total time for sending the identification signal for specific use is short or as the using time or the amount of using packet of a general user other than the user of the base station is larger" in lines 3-5. It is unclear what this limitation means. For the purpose of examination it is assumed to mean "according to the period of time for during which the identification signal for specific use was sent."

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-2, 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2004/0072574 to Matz et al.

Regarding claim 1, Matz teaches a mobile communication system comprising a base station and a terminal,

the base station allowing a downlink signal to include not only a base station ID number indicating the base station but also an identification signal for specific use indicating that the base station is for specific use and sending the downlink signal (i.e. a cell site (base station) transmits a message notifying a subscriber that rates are discounted in the cell, therefore the base station is for specific use; paragraphs 0021, 0084, 0087. The cell site further sends its cell ID to the SCD; paragraph 0063), and

the terminal comprising a memory that stores a list of base station ID numbers of an accessible base station or an inaccessible base station every identification signal for specific use (i.e. a SCD (stationary cellular device, i.e. a terminal) has a list stored in memory comprising permissible Cell IDs; paragraph 0018, 0020, 0038), and

searching whether or not the base station ID number in the received downlink signal is in the list of base station ID number every the detected identification signal for specific use in the memory when the identification signal for specific use detected from the downlink signal is ON (i.e. when the SCD attempts to make a call, it compares the originating cell ID to the list of permissible cell IDs; paragraphs 0018, 0020, 0063) and

performing communication with the base station only when the access is OK (i.e. the access is granted or denied based on whether the originating cell ID is on the list; paragraphs 0018, 0020, 0063).

Regarding claim 2, Matz teaches a mobile communication system according to claim 1, wherein the base station allows the identification signal for specific use to be included in a downlink common channel and sends the signal (i.e. Matz teaches the discount messages sent by the network are SMS messages in a CDMA cellular system;

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paragraphs 0087. in CDMA systems, SMS messages are transmitted to a user terminal over a forward access channel, which is a downlink common channel).

Regarding claim 6, Matz teaches a base station in a mobile communication system, the mobile communication system comprising the base station and a terminal,

the base station allowing a downlink signal to include not only a base station identification number indicating the base station but also an identification signal for specific use indicating the base station is for specific use, and sending the downlink signal (i.e. a cell site (base station) transmits a message notifying a subscriber that rates are discounted in the cell, therefore the base station is for specific use; paragraphs 0021, 0084, 0087. The cell site further sends its cell ID to the SCD; paragraph 0063),

the terminal comprising a memory that stores a list of base station identification number of an accessible base station or an inaccessible base station every the identification signal for specific use (i.e. a SCD (stationary cellular device, i.e. a terminal) has a list stored in memory comprising permissible Cell IDs; paragraph 0018, 0020, 0038), and

searching whether or not the base station ID number in the received downlink signal is in the list of base station ID number every the detected identification signal for specific use in the memory when the identification signal for specific use detected from the downlink signal is ON and performing communication with the base station only when the access is OK (i.e. when the SCD attempts to make a call, it compares the

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originating cell ID to the list of permissible cell IDs and grants or denies access based on whether the originating cell ID is on the list; paragraphs 0018, 0020, 0063), and

the base station comprising an identification signal generation unit that generates the identification signal for specific use and a modulation unit that allows the generated identification signal for specific use and the base station identification signal to be included in the downlink signal and sends the downlink signal (i.e. the SCD receives the message indicating discounted rates from the originating cell site (i.e. base station), therefore an identification signal generation unit; paragraph 0087. The SCD also receives the cell site ID; paragraph 0063).

Regarding claim 7, Matz teaches a base station according to claim 6, wherein the base station allows the identification signal for specific use to be included in a downlink common channel and sends the signal (i.e. Matz teaches the discount messages sent by the network are SMS messages in a CDMA cellular system; paragraphs 0087. in CDMA systems, SMS messages are transmitted to a user terminal over a forward access channel, which is a downlink common channel).

Regarding claim 8, Matz teaches a base station according to claim 6, further comprising an input unit that inputs whether or not a resource of the base station is to be occupied, wherein the identification signal generation unit generates the identification signal for specific use on the basis of an input result of the input unit indicating that the resource of the base station is to be occupied (i.e. the MSC of the cell site is instructed by the traffic control application to apply a control scheme, or rate change, based on the traffic conditions and notifies subscribers of the rate change; paragraphs 0076, 0084,

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0087. The network offers a discount calculated to increase traffic at the cell site (i.e. occupy the base station); paragraph 0084. In order to notify subscribers, the cell site (base station) must have an input unit to receive signals from the MSC).

Regarding claim 9, Matz teaches a terminal in a mobile communication system, the mobile communication system comprising a base station and the terminal,

the base station allowing a downlink signal to include not only a base station identification number indicating the base station but also an identification signal for specific use indicating the base station is for specific use and sending the downlink signal (i.e. a cell site (base station) transmits a message notifying a subscriber that rates are discounted in the cell, therefore the base station is for specific use; paragraphs 0021, 0084, 0087. The cell site further sends its cell ID to the SCD; paragraph 0063),

the terminal comprising:

a memory that stores a list of base station identification number of an accessible base station or an inaccessible base station every identification signal for specific use (i.e. a SCD (stationary cellular device, i.e. a terminal) has a list stored in memory comprising permissible Cell IDs; paragraph 0018, 0020, 0038); and

a determination unit that searches whether or not the base station ID number in the received downlink signal is in the list of base station ID number every the detected identification signal for specific use in the memory when the identification signal for specific use detected from the downlink signal is ON and performs communication with the base station only when the access is OK (i.e. when the SCD attempts to make a



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call, it compares the originating cell ID to the list of permissible cell IDs and grants or denies access based on whether the originating cell ID is on the list; paragraphs 0018, 0020, 0063).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matz in view of Official Notice.

Regarding claim 3, Matz teaches a mobile communication system according to claim 1, further comprising a mobile communication network connected to the base station, wherein

the mobile communication network sends the information to a database for storing the information (i.e. a Traffic Control Application analyzes traffic intensity data from a cell to determine when to adjust the traffic control scheme, which may include increasing or discounting the charging rates of the cell; paragraph 0075, 0082, 0084. The Traffic Control Application instructs the MSC (connected to the cell site serving the affected cell) to implement the appropriate control scheme, or rate change, and also notifies the billing application so that the rate charged to customers corresponds to the adjusted rate, therefore sending the information to a database; paragraph 0076).

Matz does not specifically teach wherein the base station periodically sends information indicating whether or not the identification signal for specific use is sent; however, Examiner takes Official Notice that at the time the invention was made it was known in the art of communications to acknowledge communications between network nodes in order to ensure that sent messages are received and improve reliability. In acknowledging the instruction to adjust the control scheme, the base station indicates whether the SMS messages advising customers of rate changes were sent. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the cellular communications system of Matz to use message acknowledgments in order to ensure that sent messages are received.

Regarding claim 4, the combination of Matz and Official Notice teaches a mobile communication system according to claim 3, wherein the mobile communication network comprises a discount rate calculation unit that calculates a charge discount rate of a user of the base station on the basis of using information on the base station stored in the database (i.e. the billing application charges customers the rate indicated by the control scheme, which may be a rate discount, therefore a discount rate calculation unit; paragraphs 0076, 0084).

Regarding claim 5, the combination of Matz and Official Notice teaches a mobile communication system according to claim 4, wherein the discount rate calculation unit increases the charge discount rate of the user of the base station as the total time for sending the identification signal for specific use is short or as the using time or the amount of using packet of a general user other than the user of the base station is

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larger (i.e. the MSC of the base station implements an appropriate control scheme, or rate change, until traffic conditions improve, at which point the rate reverts; paragraph 0076, 0084. When traffic conditions improve a concluding message is sent notifying customers that the adjustment has ended; paragraph 0087. As the billing application charges customers according to the implemented scheme, the charged discount reflects the time during which the base station signaled that discounted rates were offered; paragraph 0076).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Pitt whose telephone number is (571) 270-7466. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/B. P./  
Examiner, Art Unit 2617